

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A deposition method of forming a deposit on a substrate with a barrier layer comprising the steps of:
 - providing a substrate comprising an active substrate;
 - contacting the substrate with an organic solution comprising a desired deposition component, the desired deposition component having a more noble composition than the less noble composition of the active substrate;
 - spontaneously displacing the active substrate with a desired deposition component; and
 - spontaneously depositing the desired deposition component from the organic solution onto the active substrate.
 - providing a polarizing, poorly electrical conducting organic solution with a desired deposition component;
 - providing a deposition substrate;
 - treating a barrier layer;
 - seeding the deposition substrate with a seed composition comprising a more noble composition than a less noble deposition substrate; and
 - depositing the desired deposition component from the polarizing, poorly electrical conducting organic solution onto the substrate to form a seed composition or film.
2. (Currently amended) The method of claim 1 wherein the substrate seed composition comprises at least one material selected from the group consisting of a metal, metal alloy, and metal containing compound.

3. (Currently amended) The method of claim [2] 1 wherein the deposited or displacing deposition component further comprises a wherein the seed composition comprising comprises a member material selected from the group consisting of copper, platinum, palladium, gold, zinc, iron, cadmium, silver, lead, cobalt, nickel, and mixtures thereof.

4. (Original) The method of claim 1 wherein the deposition component comprises at least one material selected from the group consisting of a metal, a metal alloy, a metal compound, a metal ion, and an organometallic complex.

5. (Original) The method of claim 4 wherein the deposition component comprises a material member selected from the group consisting of copper, gold, platinum, palladium, silver, lead, zinc, tin, nickel, iron, and mixtures thereof.

6. (Currently amended) The method of claim [5] 14 wherein the barrier layer ~~metal~~ comprises at least one material selected from the group consisting of a metal nitride, a metal silicate, a metal combination and a non-metal combination.

7. (Cancelled)

8. (Cancelled)

9. (Currently amended) The method of claim 1 [8] wherein the ~~deposition~~ substrate comprises at least one ~~composition~~ material selected from the group consisting of tungsten-based, tantalum-based, and titanium-based materials. ~~and any other less noble compositions.~~

10. (Currently amended) The method of claim 9 wherein said deposition substrate comprises at least one material selected from the group consisting of Ti, Ta, W, TiN, TaN, W₂N, TiSiN, WN, WSiN and TaSiN.

11. (Currently amended) The method of claim 1 wherein said ~~the~~ active deposition substrate comprises at least one material selected from the group consisting of copper, nickel, iron, aluminum, steel, zinc and silver.

12. (Cancelled)

13. (Currently amended) The method of claim 1 wherein the ~~polarizing, poorly electrical conducting~~ organic solution comprises at least two deposition components.

14. (Currently amended) The method of claim 1 ~~where~~ wherein the deposition substrate comprises a barrier layer.

15. (Currently amended) The method of claim 1 further comprising the step of treating the ~~deposition~~ substrate.

16. (Currently amended) The method of claim 15 wherein the treating step comprises introducing a halogenated compound into the ~~polarizing, poorly electrical conducting~~ organic solution.

17. (Currently amended) The method of claim 16 wherein the halogenated compound comprises at least one member material selected from the group consisting of HBF₄, HF, NaF, H₂SiF₆, and HCl.

18. (Currently amended) The method of claim 15 wherein the treating step comprises introducing a non-halogenated compound into the ~~polarizing, poorly electrical-conducting~~ organic solution.

19. (Original) The method of claim 18 wherein the non-halogenated compound comprises H_2SO_4 .

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Currently amended) The method of claim 1 wherein the ~~polarizing, poorly electrical-conducting~~ organic solution comprises a cation exchange reactant.

28. (Cancelled)

- 29. (Cancelled)
- 30. (Cancelled)
- 31. (Cancelled)
- 32. (Cancelled)
- 33. (Cancelled)
- 34. (Cancelled)
- 35. (Cancelled)
- 36. (Cancelled)
- 37. (Cancelled)
- 38. (Cancelled)
- 39. (Original) The method of claim 1 wherein the step of depositing comprises using two galvanic half-cell reactions.
- 40. (Cancelled)
- 41. (Cancelled)

42. (Currently amended) The method of claim 1 further comprising the step of loading the ~~polarizing, poorly electrical-conducting~~ organic solution with the desired deposition component.
43. (Cancelled)
44. (Original) The method of claim 1 further comprising the step of using temperatures from ambient to elevated levels.
45. (Cancelled)
46. (Cancelled)
47. (Currently amended) The method of claim 1 wherein the spontaneously depositing step comprises reducing the deposition component at a cathodic site by an electrochemical reaction.
48. (Currently amended) The method of claim 1 wherein the ~~polarizing, poorly electrical conducting~~ organic solution comprises less than 5% water by volume.
49. (Currently amended) The method of claim 1 wherein the ~~polarizing, poorly electrical conducting~~ organic solution comprises most preferably less than 0.25% water by volume.
50. (New) The method of claim 1 further comprising removing a barrier layer.
51. (New) The deposition method of claim 1 wherein the depositing of the desired deposition component comprises displacing components from a layer of the active substrate with the desired deposition component.

52. (New) The deposition method of claim 1 further comprising sensitizing the active substrate for further depositing of the desired deposition component.